

IN THE CLAIMS

Please amend claims 13 - 35.

PENDING CLAIMS

1. A computer implemented method comprising:
receiving a first set of data from a network process;
determining death of the network process;
clearing the first set of data if a time period expires; and
synchronizing the first set of data with a second set of data if the time period does not
expire, the second set of data received from the network process after the network
process restarts.
2. The computer implemented method of claim 1 further comprising indicating the first set
of data as stale when the network process is determined to be dead.
3. The computer implemented method of claim 1 wherein expiration of the time period is
determined with a timer maintained after the network process is determined to be dead.
4. The computer implemented method of claim 1 wherein the first set of data and the second
set of data are synchronized after a done signal is received.

5. The computer implemented method of claim 1 further comprising restoring a set of configurations to the network process after the network process restarts.
6. The computer implemented method of claim 1 further comprising clearing the second set of data if the time period expires and a done signal is not received.
7. A computer implemented method comprising:
 - detecting death of a process;
 - restarting the network process;
 - restoring a set of configurations to the network process;
 - if a first set of data is generated before a time period expires, then synchronizing the first set of data with a second set of data, the second set of data having been generated before the death of the network process; and
 - if the time period expires, then clearing the second set of data.
8. The computer implemented method of claim 7 further comprising indicating the second set of data as stale when the network process is detected as dead.

9. The computer implemented method of claim 7 wherein expiration of the time period is determined with a timer incremented after the network process is detected to be dead.

10. The computer implemented method of claim 7 wherein the first set of data and the second set of data are synchronized after a done signal is received.

11. The computer implemented method of claim 7 further comprising clearing the second set of data if the time period expires and a done signal is not received.

12. A network element comprising:

a cross connect control module to host a first and second network process, the first

network process to generate a first set of data after restarting and the second

network process to synchronize the first set of data with a second set of data

generated by the first network process before restarting upon determining a time

period has not expired, the time period beginning when the first network process

dies; and

a traffic card coupled to the cross connect module, the traffic card to process a set of

traffic with the synchronized first and second set of data.

13. The network element of claim 12 wherein the cross connect module comprises a first and second memory to host the first and second network process.

14. The network element of claim 12 wherein the traffic card comprises a set of processors to process the first and second set of data.

15. The network element of claim 12 wherein the cross connect module comprises:
a first memory to host the first network process;
a second memory coupled to the first memory, the second memory to host the second network process; and
a third memory coupled to the first and second memory, the third memory to store the first set of data, second set of data, and the synchronized set of data.

16. A network element comprising:
a first processor to execute a first and second network process, the first network process to generate a first set of data before restarting and a second set of data after restarting, the second network process to synchronize the first and second set of data upon determining a time period has not expired, the time period beginning when the first network process dies; and
a second processor coupled to the first processor, the second processor to process a set of traffic using the first set of data before the first network process restarts and the third set of data after the first network process restarts.

17. The network element of claim 16 wherein the first processor comprises a memory to store the first, second and third set of data.

18. The network element of claim 16 further comprising the first processor to allocate a first memory to the first network process and a second memory to the second network process.

19. The network element of claim 16 further comprising the first processor to allocate a first memory to the first network process, a second memory to the second network process, and a third memory to store the first set of data, the second set of data, and the third set of data.

20. A network element comprising:

a first memory to host a first network process, the first network process to generate a first set of data before restarting and a second set of data after restarting;

a second memory coupled to the first memory, the second memory to host a second network process, the second network process using the first and second set of data if a time period has not expired, the time period beginning when the first network process dies; and

a third memory coupled to the first and second memory, the third memory to store the first set of data before the first network processes restarts and to store a synchronized set of the first and second set of data after the first network process restarts.

21. The network element of claim 20 wherein the first memory, the second memory and the third memory are main memory.

22. The network element of claim 20 wherein the first memory, the second memory, and the third memory are mass storage.

23. The network element of claim 20 wherein the first memory, the second memory, and the third memory are a set of regions of a memory.

24. A system comprising:

a first network element to execute a first network process the first network process to generate a first set of data before restarting and a second set of data after restarting; and

a second network element coupled to the first network element, the second network element to execute a second network process, to determine the first network process died, to start a counter upon determining the first network process has died, to store the first and second set of data, and to synchronize the first and second set of data upon determining the counter has not exceeded a time period.

25. The system of claim 24 wherein the second network element comprises:

a first memory to store the first set of data and the synchronized set of data; and
a second memory to store the second set of data.

26. The system of claim 24 further comprising the second network element to clear the first and second set of data if a time period expires.

27. The system of claim 24 further comprising the second network element to mark the first set of data as stale when the first network process dies.

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28. A machine-readable medium that provides instructions, which when executed by a set of processors of one or more processors, cause said set of processors to perform operations comprising:

receiving a first set of data from a network process;

determining death of the network process;

clearing the first set of data if a time period expires; and

synchronizing the first set of data with a second set of data if the time period does not

expire, the second set of data received from the network process after the network process restarts.

29. The machine-readable medium of claim 28 further comprising indicating the first set of data as stale when the network process is determined to be dead.

30. The machine-readable medium of claim 28 wherein expiration of the time period is determined with a timer maintained after the network process is determined to be dead.

31. The machine-readable medium of claim 28 wherein the first set of data and the second set of data are synchronized after a done signal is received.

32. The machine-readable medium of claim 28 further comprising restoring a set of configurations to the network process after the network process restarts.

33. The machine-readable medium of claim 28 further comprising clearing the second set of data if the time period expires and a done signal is not received.

34. A machine-readable medium that provides instructions, which when executed by a set of processors of one or more processors, cause said set of processors to perform operations comprising:

detecting death of a process;

restarting the network process;

restoring a set of configurations to the network process;

if a first set of data is generated before a time period expires, then synchronizing the first set of data with a second set of data, the second set of data having been generated before the death of the network process; and
if the time period expires, then clearing the second set of data.

35. The machine-readable medium of claim 34 further comprising indicating the second set of data as stale when the network process is detected as dead.

36. The machine-readable medium of claim 34 wherein expiration of the time period is determined with a timer incremented after the network process is detected to be dead.

37. The machine-readable medium of claim 34 wherein the first set of data and the second set of data are synchronized after a done signal is received.

38. The machine-readable medium of claim 34 further comprising clearing the second set of data if the time period expires and a done signal is not received.